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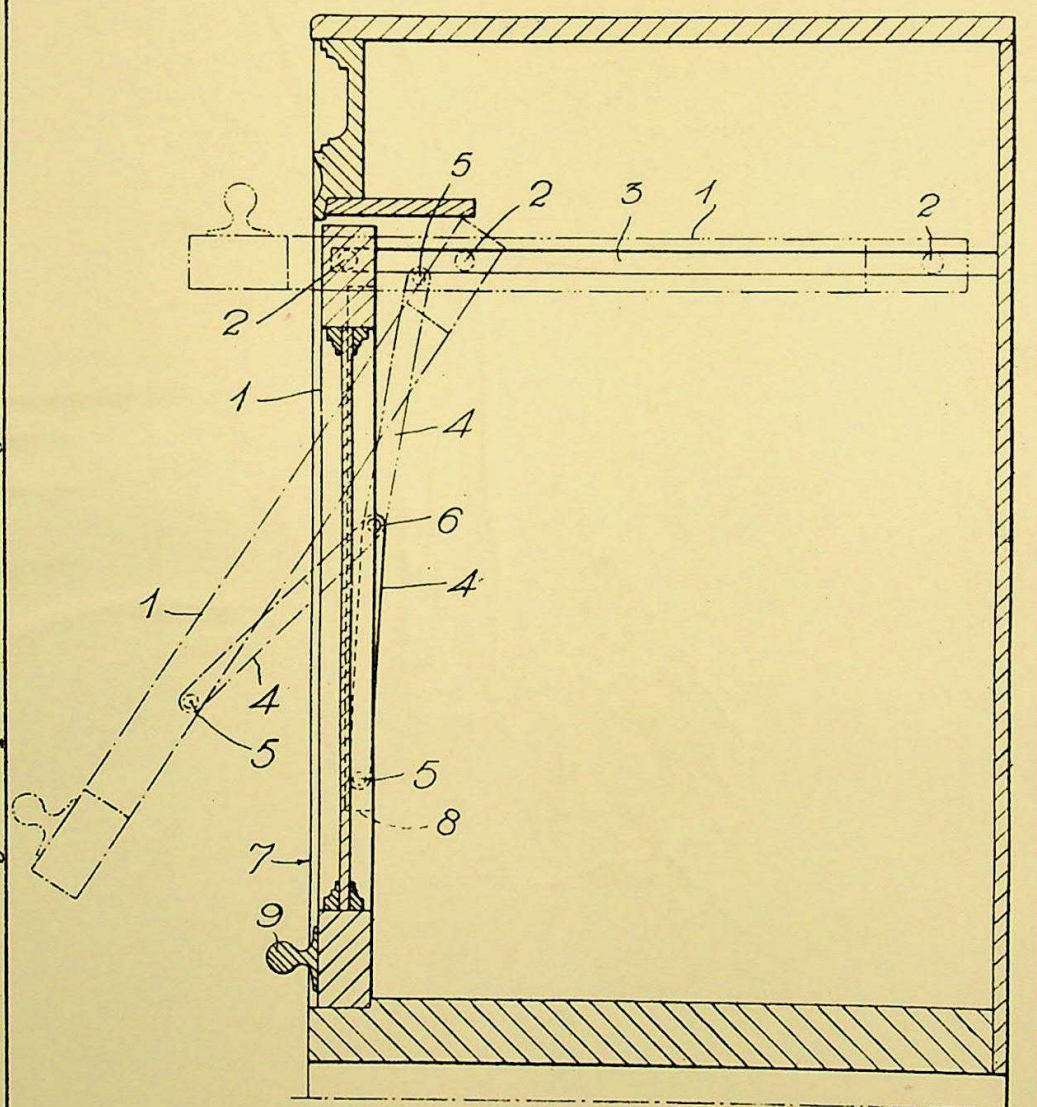
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369,779 COMPLETE SPECIFICATION

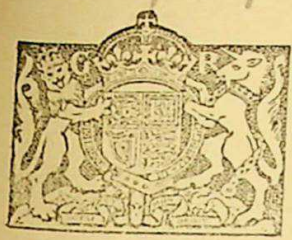
1 SHEET

[This Drawing is a reproduction of the Original on a reduced scale.]



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PATENT SPECIFICATION



Application Date : May 4, 1931. No. 13,175/31.

369,779

Complete Left : Aug. 7, 1931.

Complete Accepted : March 31, 1932.

PROVISIONAL SPECIFICATION.

Div. 298

Improvements in Doors for Book-cases, Show-cases and the like.

I, JOSEPH JOHNSON HOLME, a British subject, of 4, Bell Yard, Temple Bar, London, W.C. 2, do hereby declare the nature of this invention to be as follows:—

5 This invention relates to doors for book-cases, show-cases and the like of the general type commonly known as disappearing doors or flaps which are pivotally suspended in a vertical position by outwardly projecting pivot pins near the tops respectively of each side frame which engage slideway grooves formed in the inside surface of the case wall. In action, such disappearing doors, are swung upwardly about the common axis of the two pivot pins, and then pushed back in a horizontal position, over the tops of the books, goods, or the like, the pins sliding in the grooves.

20 The object of the present invention is to improve the general type described above by providing simple means to prevent looseness and canting of the door, and thus to permit a smooth running operating action both inwardly and outwardly, to hold the door snugly in its fully closed and fully opened positions, and to facilitate the opening action by automatically commencing the inward travel of the pivots as and when the door is pivotally raised.

30 According to the said invention, the door is hung by side pins in grooves in accordance with the general form outlined above, and, in addition, the following particular arrangement of pivoted link is added at each side. A flat link is pivoted to each side edge of the door, lying along the edge and extending upwardly (regarding the door, for the moment, in its vertically closed position)

to a point about midway between its lower end and the pivot pin of the door at or near the top thereof. At this point, i.e. the upper end of the pivoted link, the latter is pivoted to the side of the bookcase or the like into which the door fits (and which contains the slideway groove aforesaid). The edge of the door is advantageously formed with a flat recess, extending from the bottom of the link to the top of the door, to house the link flush with the normal exterior surface of the door-edge.

By this arrangement, it will be seen that when the door is first pulled outwardly by its bottom (which is furnished with a knob or equivalent) it will not swing about the top main pivot pins, but about the respective link pivots on the book-case, and this has the effect of starting the top of the door on its inward movement. As the bottom of the door continues its upward movement, the top is still constrained to move inwardly by the links, which gradually open out away from the door edges, and such inward movement is now assisted by a manual push as in known constructions. When the door has completed its opening movement, lying substantially horizontal (main pivot pins located at the remote ends of the grooves) the links have completed a movement of about 180 degrees and now point upwards from their respective pivots on the book-case to their normally lower ends (in the door-closed position) pivoted to the door edges.

Dated this 27th day of April, 1931.
EDWIN C. AXE, A.I.M.E.,
27, Chancery Lane, London, W.C. 2,
Agent for the Applicant.

COMPLETE SPECIFICATION.

Improvements in Doors for Book-cases, Show-cases and the like.

80 I, JOSEPH JOHNSON HOLME, a British subject, of 4, Bell Yard, Temple Bar, London, W.C. 2, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

85 This invention relates to doors for book-cases, show-cases and the like of the general type commonly known as disappearing doors or flaps which are pivotally suspended in a vertical position by outwardly projecting pivot pins near the tops respectively of each side frame which engage slideway grooves formed in the inside surface of the case

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[Price 1/-]

wall. In action, such disappearing doors, are swung upwardly about the common axis of the two pivot pins, and then pushed back in a horizontal position, over the tops of the books, goods, or the like, the pins sliding in the grooves.

The object of the present invention is to improve the general type described above by providing simple means to prevent looseness and lateral canting of the door, and thus to permit a smooth-running operating action both inwardly and outwardly, to hold the door snugly in its fully closed and fully opened positions, and to facilitate the opening action by automatically commencing the inward travel of the pivots as and when the door is pivotally raised.

According to the said invention the side edges of the door are each provided with a link lying flat thereagainst and pivoted at one end to the door edge and at the other end to the bookcase or the like. Being flat, and preferably lying in a recess as described later, the link is snug and out of the way, not interfering with a flush fit of the door in the bookcase opening. The preferable arrangement is to dispose the link with one end pivoted to the door edge, and normally (door closed—vertical position) extending upwards, where its other end is pivoted about half-way between the lower end thereof and the slideway groove in the bookcase.

An embodiment of the invention will now be described in greater detail, by way of example and not of limitation, with the aid of the accompanying drawings, wherein there is illustrated a transverse vertical section through the top compartment of a bookcase.

According to the said embodiment, the door 1 is hung by side pins 2 in grooves 3 in accordance with the general form outlined in the opening paragraph hereof, and, in addition, the following particular arrangement of pivoted link is added at each side. A flat link 4 is pivoted to each side edge of the door, lying along the edge and extending upwardly (regarding the door, for the moment, in its vertically closed position as shown in full lines in the drawing) to a point about midway between its lower end 5 and the pivot pin 2 or grooves 3 of the door 1 at or near the top thereof. At this point, i.e. the upper end 6 of the pivoted link, the latter is pivoted to the side 7 of the bookcase or the like into which the door 1 fits (and which contains the slideway groove 3 aforesaid). The edge of the door is advantageously formed with a flat recess 8, extending from the bottom of the link 4, to the top

of the door, to house the link flush with the normal exterior surface of the door-edge.

By this arrangement, it will be seen that when the door is first pulled outwardly by its bottom (which is furnished with a knob 9 or equivalent) as shown in dot-and-dash lines, it will not swing about the top main pivot pins 2, but about the respective link pivots 6 on the bookcase, and this has the effect of starting the top of the door on its inward movement. As the bottom of the door continues its upward movement, the top is still constrained to move inwardly by the links 4, which gradually open out away from the door edges, and such inward movement is now assisted by a manual push as in known constructions. When the door has completed its opening movement, lying substantially horizontal (main pivot pins 2 located at the remote ends of the grooves 3) as also depicted in dot-and-dash lines the links 4 have completed a movement of about 180 degrees and now point upwards from their respective pivots 6 on the bookcase to their normally lower ends 5 (in the door-closed position—full lines) pivoted to the door edges.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Doors for bookcases and the like of the type specified characterised in that the side edges of the door are provided with a link lying flat thereagainst and pivoted at one end to the door edge and at the other end to the casing of the bookcase or the like.

2. Doors for bookcases and the like according to Claim 1 wherein the link is pivoted to the door edge, and normally (door closed) extends upwardly where its other end is pivoted about half-way between the lower end thereof and the slideway groove in the casing.

3. Doors for bookcases and the like according to either of the preceding Claims wherein the side edges of the door are recessed towards their inside faces to house the pivoted links snugly and flush with the said door edges.

4. Bookcases, showcases and the like constructed with disappearing doors or flaps substantially as herein described, and illustrated by the accompanying drawings.

Dated this 7th day of August, 1931.

EDWIN C. AXE, A.I.M.E.,

27, Chancery Lane, London, W.C. 2,
Agent for the Applicant.